

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

RC-356

Effective January 1, 2013

Revised February 1, 2013

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **December 2016**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Terrbella Classic and Terrbella Premium Stone Coated Steel Panels manufactured by

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89240 Overseas Hwy #6
Tavernier, FL 33070
(305) 360-7600

will be accepted for use in areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

Terrabella Premium: Preformed, stone coated steel panels with minimum thickness of 0.017", conforming to ASTM A 792, with a minimum yield strength of $F_y = 40$ ksi. The panel measures $43 \frac{1}{16}$ " inches wide by $17 \frac{3}{4}$ " inches high.

Terrabella Classic: Preformed, stone coated steel panels with minimum thickness of 0.17", conforming to ASTM A 792, with a minimum yield strength of $F_y = 40$ ksi. The panel measures $53 \frac{5}{32}$ " inches wide by $16 \frac{5}{32}$ " inches high.

LIMITATIONS

Roof Framing: The metal roofing panels shall be installed over a solidly sheathed minimum $\frac{15}{32}$ " plywood roof deck. The roof framing members (rafters or trusses) shall be spaced a maximum of 24" o.c.

New Roof Framing Attachment: The roof framing shall meet or exceed the uplift requirements of the International Residential Code or International Building Code and shall be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure uplift load resistance shall be as specified in each assembly.

Roof Slope: The metal roofing panels shall not be installed on roof slopes less than 3:12.

INSTALLATION INSTRUCTIONS

General: The metal roofing panels shall be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Assembly No. 1 – Terrabella Premium and Terrabella Classic Over Wood Battens

Design Wind Pressure: -67.5 psf

Deck: The roof deck shall be solidly sheathed with minimum $1\frac{5}{32}$ " plywood.

Underlayment: Minimum of one layer of underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed in accordance with the International Residential Code or International Building Code.

Battens: Minimum 2x2 No. 2 Southern Pine or Douglas Fir-Larch battens installed perpendicular to roof framing members and secured with one (1) No. 10 x 4" long corrosion resistant wood screw at each rafter. The battens are spaced a maximum of $15\frac{3}{4}$ " o.c. for the Premium panels and $14\frac{31}{32}$ " o.c. for the Classic panel.

Terrabella Premium Panel Attachment: The panels are secured to the battens with four (4) No. 9-15 x 2" long HWH self-drilling screws per panel. The screws are installed $7\frac{1}{4}$ " from each edge of the panel and spaced $8\frac{7}{8}$ " between the edge screws at the vertical section of the head lap securing the panel to the wood batten. Refer to Figure 1 for attachment details.

Terrabella Classic Panel Attachment: The panels are secured to the battens with four (4) No. 9-15 x 2" long HWH self-drilling screws per panel. The first screw is located $1\frac{1}{2}$ " from the panel edge and the remaining screws spaced $14\frac{5}{8}$ " o.c. The screws are installed at the vertical section of the head lap securing the panel to the wood batten. Refer to Figure 2 for attachment details.

Assembly No. 2 – Terrabella Premium to Deck

Design Wind Pressure: -67.5 psf

Deck: The roof deck shall be solidly sheathed with minimum $1\frac{5}{32}$ " plywood.

Underlayment: Minimum of one layer of underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed in accordance with the International Residential Code or International Building Code.

Panel Attachment: The panels are secured to the roof deck with four (4) No. 10-14 x 3" HWH self-drilling, dual thread corrosion resistant wood screws with $\frac{1}{2}$ " sealing washers per panel. The screws are installed $7\frac{1}{4}$ " from each edge of the panel and spaced $8\frac{7}{8}$ " between the edge screws through the preformed fastening tabs securing the panel to the deck. One (1) No. 9-15 x 1" HWH wood screw installed at the vertical section of the head/side lap. Refer to Figure 3 for attachment details.

Assembly No. 3 – Terrabella Classic to Deck

Design Wind Pressure: -60 psf

Deck: The roof deck shall be solidly sheathed with minimum $\frac{15}{32}$ " plywood.

Underlayment: Minimum of one layer of underlayment conforming to ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed in accordance with the International Residential Code or International Building Code.

Panel Attachment: The panels are secured to the roof deck with four (4) No. 10-14 x 3" HWH self-drilling, dual thread corrosion resistant wood screws with $\frac{1}{2}$ " sealing washers per panel. The first screw is located 1" from the panel edge and the remaining screws spaced $14\frac{5}{8}$ " o.c. The screws are installed through the top of the head lap securing the panel to the wood deck. Refer to Figure 4 for attachment details.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.

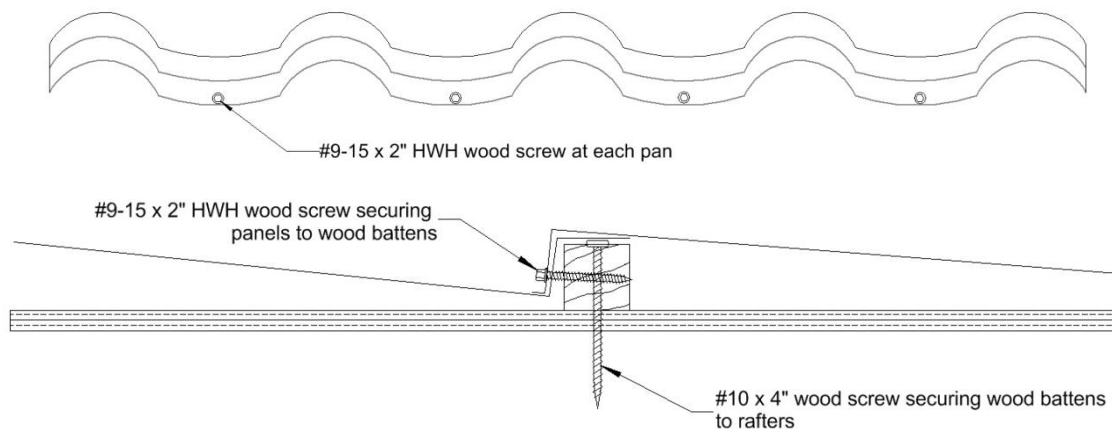


Figure 1: Terrabella Premium Panels Fastened to Battens

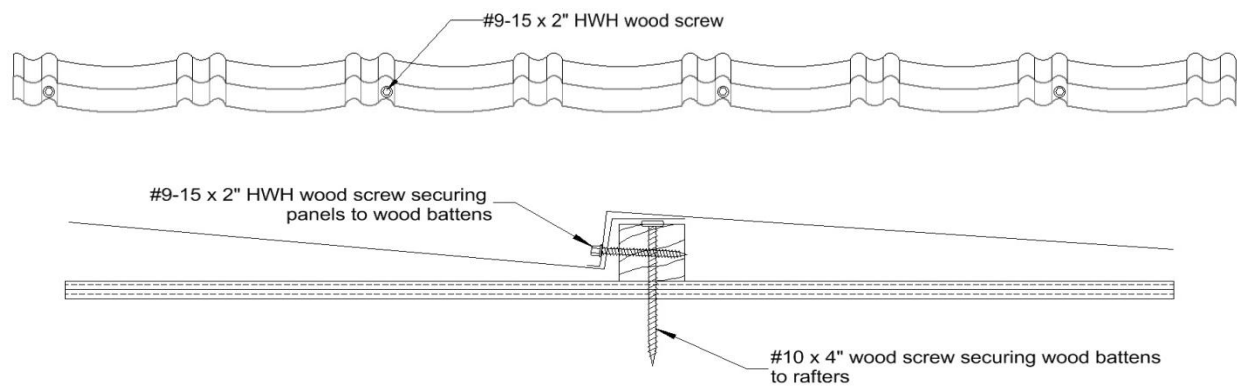


Figure 2: Terrabella Classic Panels Fastened to Battens

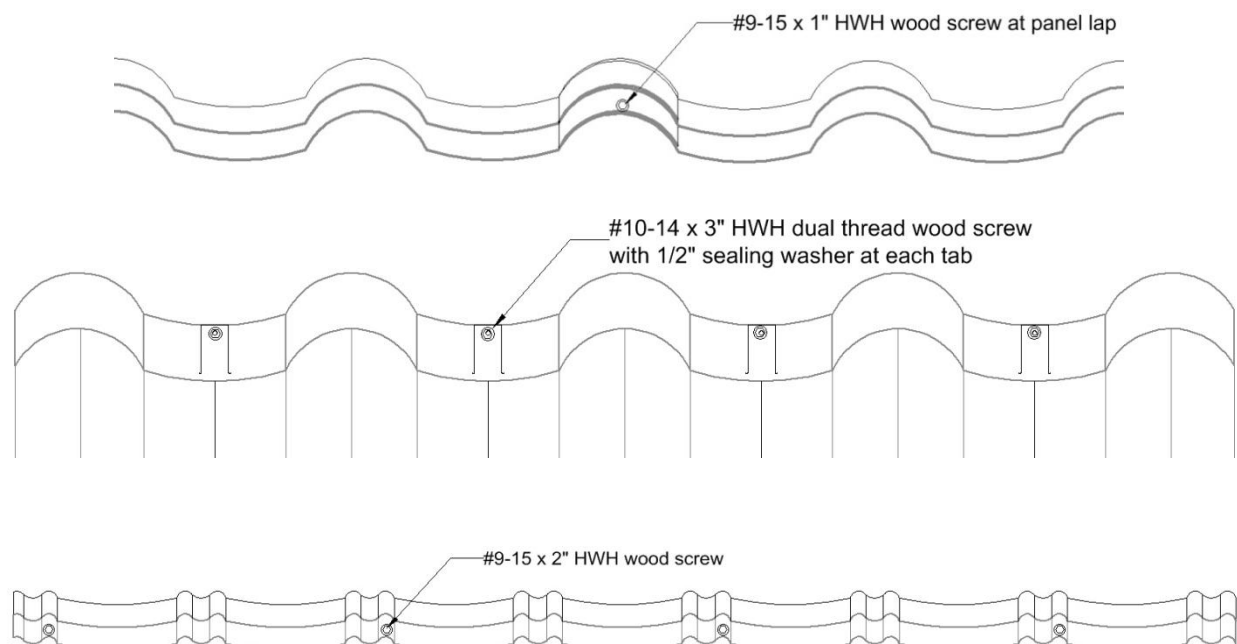


Figure 3: Terrabella Premium Panels Fastened to Deck

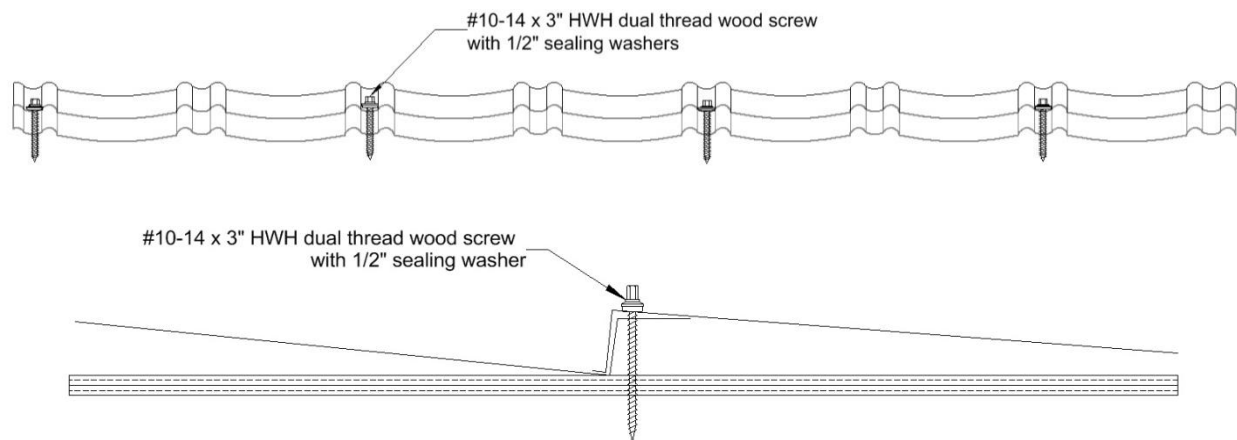


Figure 4: Terrabella Classic Panels Fastened to Deck